



KURT P. HENKE
Fire Chief

Sacramento Metropolitan Fire District

Community Risk Reduction Division

3012 Gold Canal Drive · Rancho Cordova, CA 95670 · Phone (916) 859-4330 · Fax (916) 859-3717

FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE CHECKLIST

California Fire Code Chapter 34

Scope

An operational permit is required for storage, handling or use of Class I liquids in excess of 5 gallons inside a building or in excess of 10 gallons outside of a building. Storage, handling or use of Class II or IIIA liquids in excess of 25 gallons inside a building or in excess of 60 gallons outside of a building. Storage, handling or use of Class IIIB liquids in tanks.

Conditions:

Storage

- ☐ Material Safety Data Sheets (MSDS) are readily available on site.
- ☐ Flammable and combustible liquids are not discharged onto the ground, into the atmosphere or into sewers, storm drains, etc.
- ☐ Hazard identification (i.e. NFPA 704 placard) is provided on containers, tanks and building entrances.
- ☐ Flammable and combustible liquid containers and tanks are labeled with their contents (i.e. chemical name and hazard class).
- ☐ "No Smoking" and "No Open Flame" signage is posted.
- ☐ Open flame and high temperature devices are not present.
- ☐ Flammable and combustible liquid storage and use does not exceed maximum allowable quantities and/or number of control area(s).
- ☐ Flammable and combustible liquid containers, portable tanks, tanks, piping, valves and appurtenances are Underwriter's Laboratory (UL) listed and approved.
- ☐ Class I, Division 1 electrical is provided where applicable.
- ☐ Fire suppression, detection and alarm systems are tested and maintained.
- ☐ 4A:80B:C rated fire extinguisher(s) is provided and travel distance does not exceed 50-feet.

- ☐ Spill control and secondary containment is provided for areas having individual vessels of more than 55 gallons or aggregate vessel capacity of more than 1,000 gallons.
- ☐ Flammable and combustible liquid container, tank, piping, valves and fittings are protected against vehicle impact and physical damage.
- ☐ Explosion control is provided and maintained at Class IA and IB flammable liquid storage and use areas exceeding maximum allowable quantities.
- ☐ Incompatible materials in containers exceeding 5 pounds or 0.5 gallons are separated by minimum 20 feet, non-combustible barrier, storage cabinet or gas cabinet.
- ☐ Flammable and combustible liquid tank venting is provided, maintained and free from obstructions.
- ☐ Flammable and combustible liquid outdoor, aboveground tank minimum separations are provided and maintained.
- ☐ 5 gallon spill container is provided for each protected aboveground flammable and combustible liquid tank fill connection.
- ☐ Flammable and combustible liquid tank, connected piping and ancillary equipment are maintained.
- ☐ Flammable and combustible liquid cabinets are UL listed, labeled and equipped with self-closing, three point latch door.
- ☐ Flammable and combustible liquid container storage in liquid storage cabinets does not exceed 120 gallons.
- ☐ Flammable and combustible liquid storage is not near exit(s) and does not obstruct egress route.
- ☐ Empty flammable and combustible liquid containers and portable tanks are stored as required for full containers and portable tanks.
- ☐ Shelving used for flammable and combustible liquid storage is of substantial construction, braced, anchored and provided with a lip or guard.
- ☐ 4-foot aisles at flammable and combustible liquid rack storage are provided.
- ☐ Flammable and combustible liquid solid pile and palletized storage aisles and separation are provided and maintained.
- ☐ Flammable and combustible liquid storage and ordinary combustible storage is separated by 8 feet or more and is not located in the same pile or rack.
- ☐ Class I or II flammable and combustible liquid containers less than 30 gallons are stacked no more than 3 feet or 2 containers high, unless on fixed shelf.
- ☐ Class I or II flammable and combustible liquid containers 30 gallons or more are stacked no more 1 container high.
- ☐ Flammable and combustible liquid container and portable tank storage is 3 feet or more from beams, chords, girders and sprinkler deflectors.

- ☐ In wholesale and retail occupancies Class I liquid containers are metal and contain no more than 5 gallons.
- ☐ Flammable and combustible liquid maximum storage height is maintained in wholesale and retail occupancies.
- ☐ Flammable and combustible liquid storage room spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.
- ☐ Flammable and combustible liquid warehouse spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.
- ☐ Outdoor flammable and combustible liquid storage tanks are protected against tampering and vehicle impact.
- ☐ Outdoor flammable and combustible liquid container and portable tanks are located more than 15 feet from weeds, debris and other combustible material.

Dispensing, Mixing, Use and Handling

- ☐ Flammable and combustible liquids heated to their flash point are transferred from safety cans, through a closed system, through approved pump from top of tank, by gravity with self-closing valve or by engineered transfer system.
- ☐ Nozzles for manual flammable and combustible liquid container filling are electrically interconnected to container.
- ☐ Flammable and combustible liquid blending vessels are bonded and provided non-combustible, self-closing lids.
- ☐ Heating, lighting or cooking appliances using Class I liquids are not used inside building.
- ☐ Flammable and combustible liquid processing vessel minimum separations are provided and maintained.
- ☐ Cleaning with Class IA liquids is not conducted and cleaning with Class IB, IC or II liquids is conducted in fire rated, fire sprinklered room or cleaning machine.
- ☐ Cleaning machines are UL listed and approved, do not exceed maximum solvent quantities, are ventilated and separated from other machines by minimum 30-feet or 1-hour barrier.
- ☐ Flammable and combustible liquid use, dispensing or mixing exceeding maximum allowable quantities is in fire rated, fire sprinklered building or room.
- ☐ Ventilation, explosion control, spill control and secondary containment is provided and maintained at flammable and combustible liquid use, dispensing or mixing in open and closed systems.

- ☐ Outside flammable and combustible liquid use, dispensing and handling spill control, drainage control and minimum separations are provided and maintained.
- ☐ Solvent distillation unit is UL listed, labeled, provided 40B:C rated fire extinguisher within 10-30 feet and is located and separated in accordance with listing.
- ☐ Class I or II flammable and combustible liquid, alcohol-based hand rub dispenser maximum capacities, separation, mounting location and minimum corridor width is maintained.

Additional Requirements may apply.